US 20210326867A1

(19) United States

(12) Patent Application Publication (10) Pub. No.: US 2021/0326867 A1

Bhagavatha et al. (43) Pub. Date: Oct. 21, 2021

(54) FORK-TOLERANT CONSENSUS PROTOCOL

(71) Applicant: **Storecoin Inc.**, Walnut, CA (US)

(72) Inventors: **Raghavendra Kidivoor Bhagavatha**, San Jose, CA (US); **Christopher Andrew McCoy**, San Francisco, CA (US)

(21) Appl. No.: **17/362,697**

(22) Filed: **Jun. 29, 2021**

Related U.S. Application Data

(62) Division of application No. 16/378,456, filed on Apr. 8, 2019, now Pat. No. 11,080,691.

(60) Provisional application No. 62/655,175, filed on Apr. 9, 2018.

Publication Classification

(51) **Int. Cl.**
G06Q 20/38 (2006.01)

(52) **U.S. Cl.**
CPC ***G06Q 20/3825*** (2013.01); ***G06Q 20/3827*** (2013.01); *G06Q 2220/00* (2013.01); ***G06Q 20/389*** (2013.01); ***G06Q 20/3829*** (2013.01)

(57) **ABSTRACT**

A consensus network includes Messagenodes and Validators. The Messagenodes add transactions to pre-built blocks of a blockchain. The Validators validate the transactions added to the blocks by the Messagenodes. Validators individually sign blocks in a pre-commit phase and if a block receives a threshold number of signatures, the Validators verify the signatures in a counting phase and commit the block to the blockchain. When a block is committed, it is linked to the previous sealed block in the blockchain.